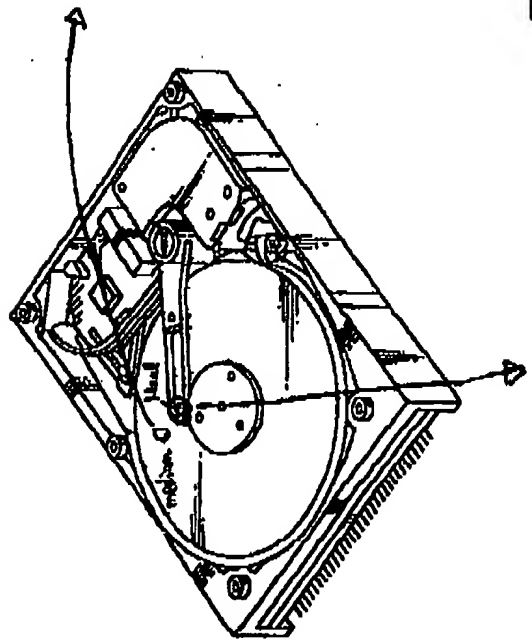
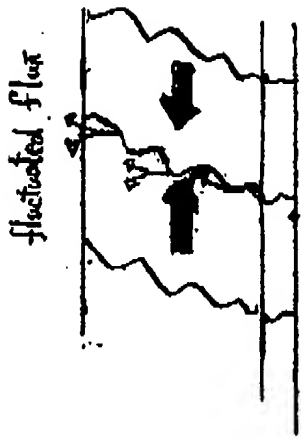
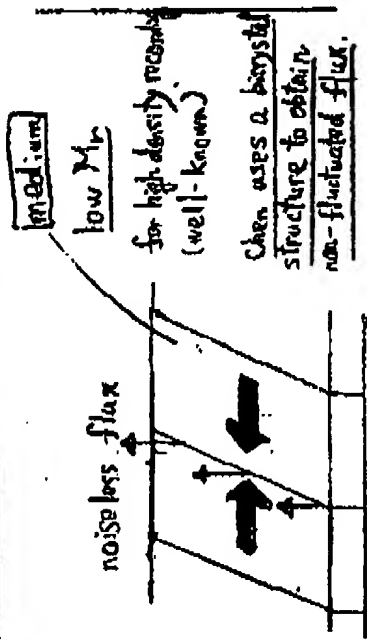


APPENDIX A



"Medium Noise free"



"Barkhausen Noise free"

free layer
(soft magnetic characteristics)



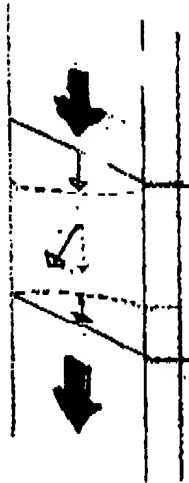
magnetic field applying films (biasing films): high M_r for Barkhausen noise free.
(our invention)

continuously rotate by medium flux.



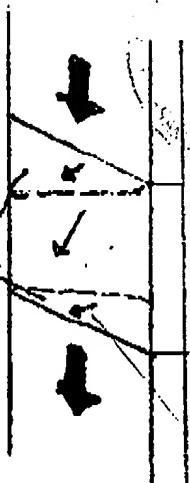
medium flux

"Barkhausen Noise"



medium flux

"jump" occurred



medium flux

We found "the bistable structure" can realize high M_r biasing films maintaining high H_c and high remanence squareness.